

PASTURE, FODDER & MARKET CROPS for SPRING PLANTING

63.9

VEGETABLE
SEED TRIALS
HORTICULTURE

For Terms of
Business, see page 2.

Maizes

For Prices,
see Yates' Current Price List.

of Pedigree Strain Grown by Special Arrangement

It is with great pleasure we offer the following extensive list of Seed Maizes specially grown for us in a cool climate by experts who, in most cases, have submitted their crops to the careful inspection of representatives of the Department of Agriculture. Seed produced in a cool climate means vigor and comparative freedom from weevil and diseases. Every care has been taken to ensure, as far as possible, purity and trueness of strain. The stock seed from which these crops were grown has been very carefully selected with a view to improving the heavy yielding qualities as well as improving the type.

A word about topping and tilling: Experts all agree that this is not necessary to ensure purity of type. The slightly irregularly shaped grains from the bottoms and tops of the cobs are the same blood exactly as the more shapely grains from the centres of the cobs and in theory and in practice will produce exactly the same blood. Topping and tilling is an expensive item, especially on high quality seed of this nature, and we could not offer these lines at anything like present rates if we were to top and tail. All these lines have been carefully graded and thoroughly conditioned and we offer them to discriminating growers with the greatest confidence.

While the later maturing Maizes are best grown on rich soils in typical Maize growing districts for producing heavy crops of grain, some of the earlier maturing kinds are quite suitable for growing in drier districts, such as the Western slopes and Highlands where the

crop is required. They mostly yield heavy succulent leafy growth, very suitable for cutting and feeding green. In this respect they are superior to some of the yellow grained sorts.

For grain, sow Maize at from 8-15 lbs. per acre, according to variety. For green fodder, when sown in drills (which is the best method), use from $\frac{1}{2}$ to 1 bushel per acre, according to variety, or, if broadcasting, from $1\frac{1}{2}$ to 2 bushels per acre. Fifty-six pounds of Maize equals one bushel.

Although there are innumerable varieties of Maizes, those following are standard, proved kinds. Amongst them will be found an excellent sort for any district, either for grain or green fodder.

Varieties of Maizes

(In order of earliness.)

For Prices, see Section 16 of Yates' Current Price List.

60 DAY YELLOW FLINT.—One of our new introductions, this is a very small yellow grained variety of the flint type. Extremely dwarf in habit of growth; in our tests we were able to mature it in sixty days from sowing. Should be useful for poultry feeders and others requiring early yields of this very small type grain. Stocks very limited.

EARLY WHITE DAWN FLINT.—Another of our new introductions, this matured in our tests in ninety days from sowing. Yields a reasonably heavy crop of white flint type grain of fair size, remarkably vigorous in growth considering its extreme earliness, and it holds great promise for early green feed. Supplies limited.

EARLY MORN.—Greatly improved by selection. Our strain of this very valuable early maturing variety is greatly improved in its yield of high-class yellow market grain. Early Morn succeeds in cold districts as well as in hot, dry districts, owing to its quick maturing habit enabling it to take advantage of good seasonal conditions over a short period. This Maize is not a very tall grower, usually about five or six feet, and it may be sown more thickly in the rows. The grain is short and stout and of bright colour and very attractive in appearance.

FUNK'S EARLY YELLOW DENT.—One of the earliest of the "dent" varieties, maturing next after Early Morn. Very hardy and drought resistant and thoroughly recommended as a good grain yielder in dry difficult conditions. Good market quality yellow grain.

SILVERMINE (IOWA).—One of the earliest whites, grains deep and solid—wonderfully early green feed, hardy and drought-resistant. It produces heavy yields of white "dent" grain and is regarded as best early of its type.

WELLINGROVE (or EARLY YELLOW DENT).—Mid-season, maturing a little later and yielding a little heavier than Funk's Early Yellow Dent. Suitable for grain in early districts.

GOLDEN SUPERB.—Splendid early maturer for typical Maize land. Dark amber or reddish coloured grain of market quality.

SMALL LEAMING.—A popular mid-season variety on the North Coast, well favoured for early green feed. Usually available in yellow grains; sometimes we have a red form. Thick stalks and broad leaves. Short narrow grains.

SMALL RED HOGAN.—Somewhat like Small Leaming; good for early green feed.

HICKORY KING.—Maincrop white variety, especially suitable for green fodder as it suckers freely. Large broad grains and one of the best whites; very hardy for poor soils.

FITZROY (or IMPROVED YELLOW DENT).—Late maturing yellow grained sort, growing in popularity. A heavy yielder of good "dent" type high market quality grain, moderately thick, broad and deep, bright coloured and very attractive; a standard Maize for true Maize districts. Gives very heavy yields of succulent green feed—an excellent silage sort.

LARGE RED HOGAN.—Very old standard variety, latest maturing sort; under good conditions yields very heavy crops of thick broad deep grain. Medium red in colour, bright in appearance, it requires rich soils and a long season.

90 DAY FLINT.—An old favourite variety for early green fodder, although not so early as its name would indicate. Grain very hard flint type.

No. 2 WHITE REGRADED.—A reasonably-priced line of white grain we put up for those requiring larger quantities for sowing for green feed only. Splendid for broadcasting.

No. 2 YELLOW REGRADED.—A line carefully regraded of yellow grained Maize, very reasonably priced.

A NEW SEASON OPENS

THE coming of Spring opens a new season with all its natural opportunities for land-holders to augment their welfare and surmount some of their many difficulties. A new journey round the seasons is commenced and it behoves all of us to use such opportunities for economic improvement as come our way.

Our business is linked up with primary production, and we are carrying on with vigorous management and enthusiastic effort in order to do our part of the nation's work to the best of our ability.

ARTHUR YATES & CO. LTD.

later Maizes would have little chance of maturing properly. The quick maturing habit and hardiness of some of these early varieties enables them to give surprisingly good yields of grain on any good agricultural country provided they are sown in fallowed land and a reasonable quantity of summer rains may be expected. Our improved strain of Early Morn is an outstanding variety of this type. It is the quickest maturer of yellow grains of a good market type. As a rule, of course, the main season and late sorts are heavier croppers than the earlier sorts.

We list hereunder a wide range of Maizes with brief descriptions and we invite inquiries if doubt is felt as to which sort is likely to prove best for any special purpose, either for grain or for green fodder. The white grained Maizes should not be overlooked when a green fodder

Mr. J. T. W. — TENTERFIELD, Writes:—

"I purchased two bushels of Silvermine Maize Seed from you which I planted for last year's crop and am pleased to say it turned out an excellent sample. An expert from the Department of Agriculture heard I had this variety and he came and inspected it in the field and purchased a quantity for the Department and I have had orders from half a dozen places in N.S.W. and Queensland."

YATES' MACHINE-DRESSED & TESTED SEEDS
"LESS NEED BE SOWN PER ACRE"

STRONGER CROPS *from* YATES' MACHINE-DRESSED AND TESTED SEEDS

Sorghums

Sorghums are the great standby for autumn and winter cutting fodder. The sugar content of Sorghums is most important, because they are cut and used after the flowering stage when the stalk is fully developed and yet succulent and juicy and the sweetness of these stalks increases the milk-producing and fattening qualities of Sorghum fodder enormously. While, before the cold weather comes round, most of the leaves of the Sorghums will still be green and palatable, later on they will tend to shed, but the stalks retain their succulence and sugar content well into the winter if the right varieties are grown.

There are two outstanding Sorghums: Saccaline, which has been in favour for very many years now, and White African, which is a more recent introduction, but gaining more popularity every year. Both these varieties are remarkable for their sugar content and for the way in which they retain their succulence, even after standing in the paddock for weeks and sometimes months after maturity.

There are earlier maturing Sorghums; they do not produce the same bulk of fodder but, where a quick crop is required, such as through enforced late planting through seasonal or other causes, they have their value.

Although the saccharine varieties of Sorghum are not regarded as really safe to use before the flowering stage; while green and succulent and the crop is well grown, it has been frequently demonstrated that if cut and allowed to wilt well before feeding to the stock, they are comparatively safe at any stage. It is advisable, therefore, when cutting a Sorghum crop that has only just reached the flowering stage and therefore in a very succulent condition, to allow the fodder to wilt somewhat after cutting before feeding out.

This year we are able to offer Grain Sorghum. This type is grown for the seed it produces. These seeds are much larger than the fodder Sorghums and are said to be very close to Maize grains in feeding value. They may be grown where the conditions are a little too dry for Maize, and heavy yields of grain are often obtained. Great difficulty, however, is frequently experienced by the depredations of birds, owing to the somewhat unprotected nature of the seed heads. Grain Sorghums are practically non-saccharine. They may be used for green feed where better varieties for this purpose are not available. Sorghums are hardier than Maizes, standing poorer and drier soil conditions.

In practically all dairying districts, including those inland, provided proper cultivation methods are carried out, Sorghums are one of the best reserves for autumn and winter feed. The varieties we stock are listed hereunder and although, as a rule, sowing in drills to allow for inter-row cultivation is the best, requiring approximately 10 lbs. of seed per acre, in very well-worked soils where there is ample rainfall broadcast crops sown at the rate of from 20-30 lbs. per acre often give excellent results, producing a finer stalk than the drill-sown crop. In very rich moist land where an extra fine stemmed crop is desired, up to 50 lbs. per acre may be broadcast.

The earliest sowings may be made as soon as frosts are over and may be continued up to the end of January—choosing an earlier maturing sort for the later sowings. November and December are usually considered the best planting months for main crops.

Varieties listed hereunder are approximately in order of earliness. Many varieties not listed have been grown. Our experience has proved, however, that the varieties we are now stocking are standard sorts which cover the requirements of practically all users.

VARIETIES

(In order of earliness.)

For Prices see Section 15 of Yates' Current Price List.

EARLY AMBERCANE.—Earliest sort, suitable for dry conditions to produce quick green feed. Not recommended for retaining for winter, as stalks become dry and pithy and have very little sugar content.

OXLEY (EARLY SUMAC).—Probably the earliest of the sweet varieties. Often difficult to obtain. A good sort where seasons are short.

COWPER No. 61.—Somewhat similar to Saccaline, very sweet, succulent, heavy yielding, stands well into the winter, but earlier.

EARLY ORANGE.—Claimed to be very drought-resistant, very sweet and heavy cropping and hardy. A little earlier than Saccaline.

SACCALINE.—The standard Sorghum, exceptionally rich in sugar, very palatable and fattening to all classes of stock. Holds its succulence well into the winter without becoming pithy. Shows a persistent ratooning habit.

WHITE AFRICAN.—A late maturing sort coming into favour, very sweet, remarkable powers of standing into the winter and holding succulence. Very heavy cropper; must be sown early owing to lateness of maturity. It is difficult to obtain good growing seed of this variety; we give special care in this respect.

LATE SUMAC (COLLIER).—Heavy yielding late sort, very sweet and juicy. Said to resist Red Stand or Rust.

PLANTERS' FRIEND.—Old standard late season variety, stands well into the cold weather, but inclined to become pithy. Has been largely superseded by Saccaline and White African, but it is still among the hardiest of them all.

GRAIN SORGHUM—MILO.—There are several varieties of Grain Sorghum: Milo may be regarded as one of the most popular and we have limited supplies to offer this season. Sometimes we can also offer a variety known as Feterita. These are grown mainly for the grain yield. It is claimed that this grain is almost as nutritive as Maize. The crop is often difficult to save owing to the depredations of birds.

Millets

Millets are the quickest growing of all summer fodder crops. Their use in the past has been practically confined to types suitable for both cutting and grazing, such as Japanese and Hungarian Millet. As a "catch crop," to give a green pick when the pastures are ripened and dry and one that will need a minimum amount of labour in soil preparation and sowing, the Millets are eminently suitable. They will grow well on average land with no expensive cultivation. Japanese is the outstanding variety for these combined purposes; it is a quick grower, producing succulent stalks and leaves, and makes very quick recovery after being grazed or cut. This variety grows up to 3 ft. 6 in. or more high and will stand a dry "pinch" better than most millets. The Hungarian is finer in the leaves and stalk, just as quick growing, but makes poor recovery after being cut or grazed. It is frequently used for producing summer hay crops, owing to the fineness of the stalks and leaves.

Japanese Millet is grown very widely all over the State. Advantage may be taken of seasonable rains at almost any time throughout the spring, summer and early autumn months to obtain quick green feed. No great soil preparation is necessary provided ample moisture is present. The seed is cheap and as little as 20 lbs. per acre broadcast gives good results. About this rate of sowing would be sufficient for the Hungarian variety also.

This year we are offering two Millets not so well known by the fodder grower, namely, Pearl Millet and Queensland Giant Panicum.

Pearl Millet is one of the heaviest-producing green fodder crops of all the Millets. The stalks and foliage are very heavy and it could not be regarded as a good grazing type, as it would not stand the trampling of stock; but to produce a cutting crop it is outstanding, owing to the enormous weight of greenstuff available per acre in the shortest possible time. It may be described as giving the results of a small type of Sorghum or Maize combined with the very quick growing capacity of Millet. It does not show much recovery after being cut; we strongly recommend plantings of this valuable variety. Sow in drills, to allow of inter-row cultivation, about 10 or 12 lbs. per acre.

Queensland Giant Panicum may be described as a giant form of Hungarian Millet. It is fairly fine in the leaf and stalk, but grows to a great height and produces a very heavy crop of fine leaves and stalks. This Millet does not show much recovery after the crop is cut, but it produces an enormous quantity of green stuff per acre and, if carefully handled, good quality hay could no doubt be made from same. We recommend sowing in drills, using from 10 to 12 lbs. of seed per acre.

Broom Millet is grown for broom making. The undeveloped seed stalks and heads are used for this purpose. It is not usually regarded as much of a fodder Millet. This is sown in drills on good rich land.

Other Millets frequently stocked by Seedsmen for bird seed purposes have less value as green fodders, but are produced for the seed mainly. Among the quickest growing of these is the White French Millet.

VARIETIES

For prices, see Section 14 of Yates' Current Price List.

Japanese.—The very best dual purpose sort for grazing or cutting. Comes again readily and stands difficult conditions. Best variety to grow for quick green feed; best sown broadcast.

Hungarian.—Finer in the stalk than Japanese Millet and often preferred for making summer hay. It does not show such a good recovery after first cutting. Best sown broadcast.

Pearl.—Well worth growing in drills for heavy yields of succulent green fodder. A most attractive kind, not yet well known by fodder growers. Cultivate between rows to force on growth. Not suitable for grazing.

Queensland Giant Panicum.—Usually difficult to obtain; gives tremendous yields for cutting fodder or hay. Fairly fine in the stalk and leaf. Recommend sowing in drills and cultivating between rows to force on growth. Well worth trying in the warmer dairying districts.

TERMS OF BUSINESS

Conditions of Sale and Non-Warranty

We believe that all Seeds Bulbs and Roots sold by us are of the description and kind specified by us at the time of sale but owing to the practical impossibility in many cases of being certain of this we give no undertaking that such Seeds Bulbs or Roots will correspond with the description under which they are sold and we make all sales subject to this condition. We further give no warranty expressed or implied as to their growth description quality or productiveness and will not be in any way responsible for the crop. If the purchaser does not accept the goods sold to him on these terms they are at once to be returned to us and any money paid to us will be refunded.

ARTHUR YATES & CO. LIMITED.

PRICES.—We do not print prices in this Descriptive List, as values fluctuate, and some of our supplies have not been received into store at time of going to press. All charges are set out in our Price List of Farm Seeds current at time of booking order. The Price List now current is sent you herewith, and later issues will be posted promptly on receipt of enquiry.

DELIVERY.—We deliver Seeds on rail or wharf, Sydney, after which Seeds are on customer's account and at his risk. Orders sent by goods train are consigned carriage forward (except to unattended platforms), unless we are otherwise instructed at time of order. Delivery within the Suburban area of Sydney will be made of Farm Seeds, Seed Potatoes, Manures and Garden Sundries, at the following rates:—Up to 14 lbs., 6d.; up to 28 lbs., 9d.; up to 1 cwt., 1/-; between one and two cwt., 2/-.

FORWARDING INSTRUCTIONS.—Please give full and careful directions with each order and we will do our utmost to comply with them. When no instructions are received we send according to our judgment.

TERMS OF PAYMENT.—Our terms are nett cash with order (including allowance for freight if goods are required by coastal steamer or passenger train, or by goods train to unattended platforms).

LOOK FOR THE SEAL ON EVERY BAG

Sudan Grass

For Prices, see Section 13 of Yates' Current Price List.



This has proved to be the outstanding summer fodder crop for Tableland and Inland conditions; in fact, anywhere where some few useful summer storms may be expected. It is the most drought-resistant annual summer crop grown. Provided Sudan Grass is sown as early as possible in the spring after danger from frost is over, in well fallowed land and sufficient rain falls to germinate and establish the crop, it will thereafter stand an enormous amount of hardship in the way of drought and heat. The great thing is to keep Sudan Grass well fed down or cut. If an early growth is allowed to come to maturity, subsequent growths will be greatly weakened. It is best to feed off or regularly cut in the early stages and allow a crop to mature towards the end of the season, for hay or pit silage if required.

Sudan Grass is somewhat delicate when first germinated; this is probably its most critical stage. Once the roots commence to develop, however, they quickly find where they can draw moisture from the sub-soil during a dry spell. To strengthen the root system and encourage development of the clumps, it is as well to put on a mob of sheep when the young crop is 6 to 8 inches high, feeding off quickly and then removing the stock. Once the plants are firmly rooted the crop should be harrowed from time to time to loosen up the surface, if it tends to harden from stock trampling, and thus retain the moisture.

Much has been said about stock poisoning from Sudan Grass. In recent years enormous quantities of Sudan Grass seed have been imported into this country and much of this seed has been badly hybridized with Sorghums. Sudan Grass crosses very easily with any of the Sorghum family, being closely related, and results of this "cross" can indeed be very poisonous to stock before the flowering stage. Pure Sudan Grass may be regarded as practically non-poisonous at any stage of its growth. Checks received in growth, especially in inland parts owing to drought, can quickly bring out the poisonous qualities in a crop of Sudan Grass which contains Sorghum-Sudan hybrid plants.

Our Sudan Grass is Australian Grown, very carefully selected as regards source of supply and carefully examined by experts who have failed to detect any signs of hybrid seeds in the sample. The seed is thoroughly machine dressed and conditioned. While we claim that we have taken every possible care to ensure that our Sudan Grass seed is as free from Sorghum-Hybrid seeds as such careful supervision can make it, in the very nature of our business we cannot enter into any guarantees in this respect.

We can state with pride that we have never yet heard of a case of stock poisoning having occurred when feeding off crops of Sudan Grass grown from Yates' Selected Sudan Grass seed. We are confident this is due to the very great care exerted in the selection and preparation of our line.

The most successful way of sowing Sudan Grass is with a Wheat Drill, using the seed at the rate of approximately 8-12 lbs. per acre and sowing through all the feed tubes of the drill. It does well on wheat country provided it has been fallowed and properly prepared. We urge that a generous dressing of Superphosphate be used when putting in this crop, because being such a heavy yielder it requires plenty of plant food.

We are always pleased to have enquiries about our Sudan Grass seed and samples are always available for inspection, post free.

Summer-Growing Pasture Grasses

For Sowing in Spring. For Prices see Section 1 of Yates' Current Price List

So much of the dairying districts in Eastern Australia comes under the influence of a predominating summer rainfall that such summer-growing varieties as Paspalum Dilatatum, Rhodes Grass, Couch and Kikuyu Grass are most important.

Paspalum Dilatatum likes a really good rainfall. Rhodes Grass will stand somewhat drier conditions. Couch Grass, while not having any great feeding value, is adapted to dry sandy soils which are often useless for anything else. Kikuyu Grass has been growing in popularity in recent years. It is just as aggressive as Paspalum Dilatatum, but we think will stand harder conditions and certainly grows longer into the winter months. This variety does not seed but we always have roots available.

Molasses Grass has come into favor in Northern Queensland; it seems to do in very hot climates and we always stock a little seed although it is somewhat scarce, at present. Even in North Coast districts of New South Wales, a little of this grass is worth trying on low-lying sheltered areas. Those making spring sowings on newly cleared areas will probably confine themselves to Paspalum Dilatatum and Rhodes Grass for the main portion of their areas, but they will probably do well to include a little Couch where the land is poor and light. For ferny areas and rough parts we recommend the planting of Kikuyu Grass roots dibbled in here and there with a hoe or mattock; they will soon take hold and rapidly spread their runners. Kikuyu Grass has already proved itself able to battle with bracken fern and low scrub growth.

Although it is not, as a rule, possible to include the winter-growing grasses and clovers in spring sowings in the warmer districts, we urge that some provision be made for their use in the autumn months. Where summer pastures give wonderful results during the warmer weather they do fail in the winter months. Much may be done by renovating the summer-growing pastures in the autumn with an efficient implement and then over-sowing with high-class winter-growing grasses and clovers. Where the pastures are properly managed this need not be done every year, but care should be used to keep up the proper balance of summer and winter growers. We are always pleased to offer advice and suggestions on this subject.

Our samples of grass seeds hereunder mentioned are, heavily machine-dressed and of tip-top growth, and we can thoroughly recommend them where a quick, even and clean "strike" is required. The Kikuyu roots are carefully packed and should travel almost anywhere.

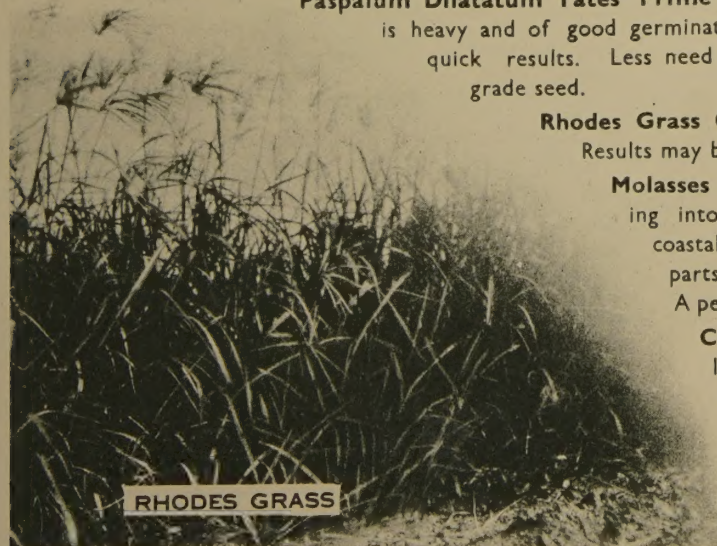
Paspalum Dilatatum Yates' Prime Hand-Shaken Machine-Dressed: Seed is heavy and of good germination, thoroughly machine-dressed. Gives quick results. Less seed be sown per acre when using this high-grade seed.

Rhodes Grass Carefully Selected Machine-Dressed: Results may be expected from this heavily-dressed seed.

Molasses Grass: Difficult to obtain, but coming into great favor in Northern Queensland coastal districts and is worth trying in the hotter parts of North Coast of New South Wales. A perennial, liking plenty of heat and moisture.

Couch Grass (Cynodon dactylon): Our line of Couch is heavy weight, heavily machine-dressed.

Kikuyu Roots: Always available in lots of 100 or 1000 or more. Seed is never available in this variety as it apparently does not seed in this country.



RHODES GRASS

Lucerne

THE KING OF FODDER CROPS

For Prices see Section 3 of Yates' Current Price List.

Lucerne is the King of Fodder Crops and its use is growing fast year by year. Not so very long ago it was regarded as necessary to choose river flats of extra good quality for Lucerne growing. Many other types of country have now been proved quite excellent for producing areas of Lucerne that will give one or two cuts of hay in the year and also give invaluable stock grazing if properly managed.

It has now been proved beyond all doubt that the best strain of Lucerne developed in this country is quite outstanding for Australian conditions. In contrast to the Australian type of Lucerne which grows practically throughout the year the types which have proved successful in the colder Northern Hemisphere naturally go dormant in the winter time and are therefore not suitable for Australian conditions. Even with our best strains of Lucerne the spring and autumn are of course the most prolific periods of growth, but, supplemented by the natural grasses and herbages which usually find their way into the Lucerne paddock in most of our districts, and especially when supplemented by a sowing of Wimmera Rye Grass, we can look to our grazing Lucerne stand to produce all-the-year-round grazing, except only in periods of extreme drought.

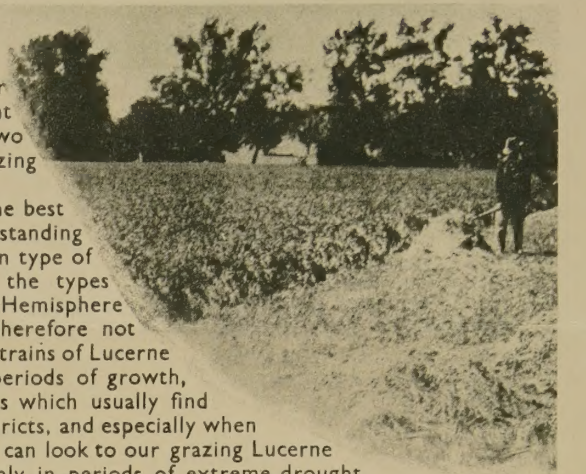
Yates' A. Y. Broadleaf Giant Upright strain of Lucerne is selected from areas where the plants have to go down very deep to moisture. This has developed the wonderful hardness and drought resistance for which Yates' Lucerne is famous, and it is of the upright broadleaf type which gives a maximum of leafage.

It has been well said that "the only place where Lucerne will not grow is where the seed has not been sown." Anywhere, whether upland or lowland, where the soil is reasonably deep before impervious bands of clay are met, Yates' Lucerne will give good returns. Its grazing value on wheat land and similar types of country is remarkable.

There is nothing gained by sowing Lucerne too thickly. To establish a real good cutting stand on rich river or creek flats, more seed must be sown, of course, than would be required for grazing areas or upland country. This is because there is more nourishment and moisture in each square yard of soil, thus more plants can be properly supported. In the drier areas of lighter soils, the plants do better when established much more thinly. The available moisture and plant food is used to better purpose and the extra strength shown by the individual plants makes up for what might appear to be thinness in the stand.

Yates' Lucerne seed is not only so carefully selected as regards the strain, but it is subjected to a very thorough machine dressing to ensure cleanliness and freedom from husks and weak seeds. The good seed is full of vitality and every grain may be expected to nourish a healthy, vigorous, strong growing plant. Another factor which adds to the value of Yates' Lucerne seed is our method of treating "hard" seeds. Our methods ensure a very high percentage of quick germination and we are confident our line is quite outstanding in this respect. We claim that less seed need be sown per acre when sowing Yates' A. Y. Broadleaf Giant Upright Lucerne seed, Machine-Dressed and Tested.

Carefully sown 10 lbs. to 12 lbs. per acre is sufficient for the richest and most typical of Lucerne flats, while 8 lbs. per acre will give a good stand on land not so moist or rich. In the drier parts, even less need be used. To establish grazing stands in conjunction with wheat or Wimmera Rye Grass, as little as 2 lbs. of the seed of Lucerne per acre gives good results. Lucerne is best sown in the autumn in most warm dry districts, but, in the cooler parts, or where fair summer rains may be expected, successful spring sowings are often carried out.



Summer-Growing Legumes

For Prices, see Sections 6 and 11 of Yates' Current Price List.

As many districts, owing to the seasonal incidence of the rainfall, look to the summer time as their main period of growth, legumes that will grow in the summer are essential to a proper balance of farming operations in such districts. Those areas which can look to the autumn, winter and spring as productive periods of the year, have plenty of legumes in the clovers, field peas, vetches, etc., etc., for their various purposes. Fortunately there is a range of summer-growing legumes available which suit the hot climates where they are required to grow. They are of great value as food stuffs and, like all legumes, have the additional advantage of being wonderful soil renovators. The class required under the heading we are dealing with are crop legumes.

The most important summer crop legumes are the cow peas and we stock these in representative varieties, but individual sorts are sometimes difficult to procure. We always like permission to substitute best variety when cow peas are ordered for this reason.

The Soy Beans are frequently inquired for, but it must be recognised that although they are summer growers, they are better adapted to districts in the higher altitudes where this time of the year is cooler. They are difficult to grow because the particular nitrofixing bacteria that favours this plant only develops slowly when the crop has been grown for more than one season in the same land. We usually offer one or two varieties.

The Mauritius Beans are frequently used in very hot coastal districts, especially in sugar cane areas. It is something of the Cow Pea type with broad leaves and has a strong growth. Velvet Beans are also a heavy foliaged prolific type suitable for hot districts, but both these kinds are sometimes difficult to procure.

Peanuts produce the best market samples as a rule in coastal districts north of Grafton in New South Wales. Home supplies, however, may be grown in many localities where they can receive a little extra care and attention.

All the above are annual or short-lived types which are necessarily to be re-sown each year. Kudzu Vine, however, is perennial in nature and is a very strong-growing type, but somewhat hard and coarse from a fodder point of view. It sends out runners which root at every joint and a small area will thus provide rooted cuttings for a much larger planting if required.

Cow Peas, Black Seeded: A vigorous trailing type, an old standard variety, produces a large bulk of green stuff.

Cow Peas, Clay Coloured: Very bushy in nature, carries a large quantity of seed pods.

Cow Peas, Poona: Inclined to be more upright in growth which makes it easy to handle for cutting. Largely used in the hot sugar cane areas.

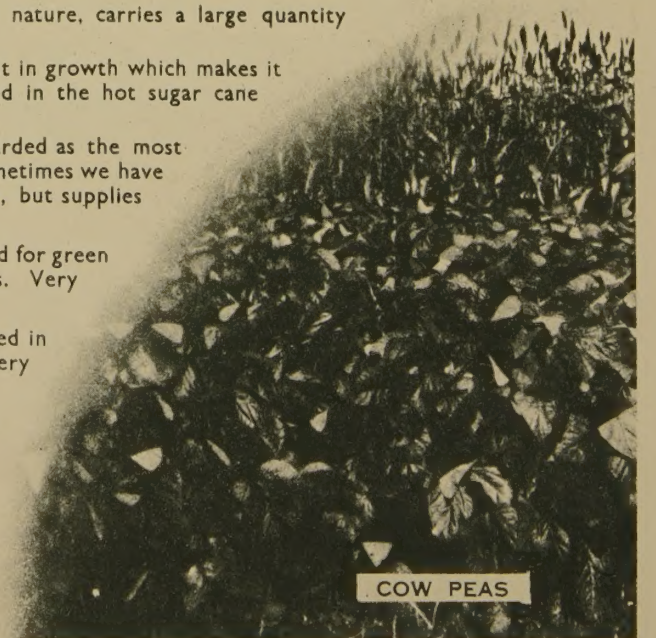
Soy Beans, Easy Cook: This is usually regarded as the most suitable variety for our conditions. Sometimes we have one or two other varieties available also, but supplies are uncertain.

Mauritius Beans: Supplies very uncertain. Used for green manuring in the hot moist sugar cane areas. Very heavy growth.

Velvet Beans: Limited supplies. Should be tried in a small way only, to test out suitability. Very similar to the Mauritius Bean.

Peanuts: We usually have supplies of the following varieties: Small Red Spanish, Small White Spanish, Large Kingaroy (Virginia Bunch), Valencia Bunch.

Kudzu Vine: Very limited supplies, but a few seeds will produce enough plants to provide cuttings to plant out a much larger area.



COW PEAS

SPRING VEGETABLE CROPS

BEANS.

For Prices, see Section 21 of Yates' Current Price List.

All our Beans are Southern grown and very carefully selected for vigor and trueness to type. We offer them with the utmost confidence in both sample and strain.

YATES' MASTERPIECE (also known as Victory, Afrikander, or Marvel).—A dwarf early bean producing a heavy first crop of magnificent market type beans; appears disease resistant, and strongly recommended.

YATES' PIONEER STRAIN OF CANADIAN WONDERS.—The result of our endeavour to select back to the original vigorous, heavy-cropping type of Canadians. Growers of Canadians should try this strain.

CANADIAN WONDER (YATES' SELECTED).—Our standard quality sample, the merits of which are recognised by all growers. Undoubtedly still the main market variety.

FELTHAM PROLIFIC.—A dwarf market type of bean, which, if it has not quite the cropping capacity of Canadian Wonder or Masterpiece, is particularly notable for its disease resistance and earliness.

YATES' EPICURE.—By far the most popular of the runner or climbing beans, being most vigorous and prolific. While not usually grown for market on account of the expense of providing supports, this variety will produce very heavy crops of green beans entirely suitable for this purpose.

All other standard varieties are stocked and are quoted in Yates' Current Price List and described in Yates' Annual Catalogue.

PEAS.

For Prices, see Section 22 of Yates' Current Price List.

In the very specialised market for seed of this most important crop, Yates' strains and samples are generally recognised as supreme.

All our varieties, except where otherwise stated, are specially grown for us in New Zealand under contract and under exacting supervision which constantly aims at a vigorous even-cropping type of top market quality Peas.

GREENFEAST.—The standard maincrop market pea. We offer as follows:

YATES' PRIME N.Z. CONTRACT GROWN.—The standard of quality.

Recommended to all growers requiring the best strain produced.

LOCAL GROWN MACHINE-DRESSED.—Bought on sample only and recommended only where price is a particular consideration.

They are heavily machine-dressed, of strong germination, and represent the best in locally produced Greenfeast Pea seed, having been chosen as good type samples.

YATES' EARLICROP.—A very early pea, useful for sowing early in the autumn, or late in the spring under conditions where Greenfeast would not properly mature. This Yates' introduction is a dark green pea of typical market quality and is rapidly growing in favour. Undoubtedly the outstanding early pea and likely to become in its class as popular as Greenfeast.

YATES' UTILITY.—Another Yates' introduction which has proved a wonderful heavy cropping early sort for cool moist districts.

All other standard varieties are stocked and are quoted in Yates' Current Price List (Section 22) and described in Yates' Annual Catalogue.

TOMATOES.

In this important market garden line we feel justified in being proud of the fact that many of the leading sorts have been introduced or developed by the House of Yates. At present a leading sort, of our introduction, in **YATES' EARLIWINNER** is proving an outstanding variety for growing without supports. It combines extreme earliness with a high yield of smooth marketable fruit of splendid colour. **BREAK O' DAY** we can recommend for those who are growing on stakes; it has shown great resistance to fusarium wilt, is of very high quality and early; the vines are very vigorous and leafy, bearing attractive scarlet fruit. **PRITCHARD** is another new introduction (not yet listed in our catalogue) of the heavy foliage type; it shows great promise as a medium early sort. For an all-round variety to produce a heavy crop, remarkably even in size, colour and shape, **BONNY BEST** is outstanding; it matures early, ripens evenly and the fruit is particularly round. Other standard sorts, which have been by no means superseded and still enjoy great popularity are **EARLIANA**, **MARGLOBE**, **CHALK'S EARLY JEWEL**, **BURWOOD PRIZE**, **YATES' IMPROVED STONE**, and **YATES' EARLY HARBINGER**. For these and all other varieties, see Yates' Annual Catalogue for descriptions, and prices are quoted in Section 24 of Yates' Current Price List.



The Wonderful New "Early Yates" Water Melon
(See letterpress below).

Mr. K. H. H., of Warkton, N.S.W., writing on 10th July, 1933, says:—
"The Early Yates' Water Melon seed procured from you last year by my brother, Mr. M. M. H., showed good quality and evenness; only two vines differing from the main type of light grey, round melons. The vines cropped continuously until cut by the frost. The melons marketed off an eighth of an acre totalled 2,000. We are growing this variety mainly in the coming season."

WATER MELONS

The wonderful new variety—EARLY YATES.

While we offer as usual all the well-known varieties of Water Melons, we have this year in the Early Yates' variety (as illustrated above) something very outstanding for those keen growers who realise the extra profit obtainable from the very early market at about Christmas time. **EARLY YATES** is a round medium-sized Melon of beautiful market quality, and a good carrier, having a light skin and brilliant red flesh. In our tests it has been ripe a full month earlier than any other variety known to us and market growers will at once realise what this means in cash returns.

All other varieties in stock, see Yates' Annual Catalogue and Current Price List (Sec. 24).

PUMPKINS and SQUASHES

For Prices, see Section 24 of Yates' Current Price List.

Although there are almost innumerable types and strains of Pumpkins, market growers are quickly realising that it is more profitable to grow the smaller, solid, readily marketable types, such as Yates' Triamble and Yates' Queensland Blue rather than the mixed and usually "windy" sorts resulting from seed saved at home, under circumstances where it is practically impossible to prevent cross breeding with mongrel types.

In offering Yates' scientifically bred strains we aim at crops even in size, type, quality and time of maturity. These factors are essential to the saving of costs in field production and to the obtaining of best prices in bulk marketing.

Special attention is also drawn to the three varieties of Hubbard Squash and the Banana Squash, all of which are really Pumpkins, being thick-skinned, good keepers and dry cookers. They have many attractive features from a growers' point of view and are now becoming recognised in the main markets.

All other varieties of Pumpkin and Squash, and also, of course, Vegetable Marrows, are listed in Yates' Annual Catalogue and Current Price List (Section 24).

ROCK MELONS

In this increasingly important market crop there are three main classes. Firstly, the medium sized, green fleshed, musk flavoured type of which that wonderful carrier **ROCKY FORD** is undoubtedly the best. Secondly, the larger salmon fleshed types, the delicate flavour of which is rapidly increasing their popularity. The leading representatives in our opinion, of this class are **GREELY WONDER** and **HALES' BEST**, both of which we strongly recommend for trial by those growers who do not yet know them. Thirdly, there are the Casaba types of melons, which are later maturing than the other kinds and which therefore come in on a less heavily supplied market. In this class **CALIFORNIAN CREAM** has been greatly in request in the main markets during the last season or two. For Prices of these and other standard varieties, see Yates' Current Price List, Section 24.

CUCUMBERS.

This is another important crop in which the House of Yates can justly claim leadership. **YATES' CRYSTAL APPLE** introduced by us some years ago has absolutely captured the market in its class. A small round fruited, heavy-cropping sort, superior to its parent **APPLE SHAPED**, it holds its colour much better. This type of cucumber is easily grown, early maturing and always finds a ready market. For those growers requiring a long green cucumber we recommend **EARLY FORTUNE** as the darkest coloured of the white spine type. It is early, very productive, and in our opinion one of the finest long varieties offered. Another variety of proved merit is that largely used **IMPROVED WHITE SPINE**; the fruit of this is of medium length, thick and solid, it packs and carries well, light to medium green in colour and very prolific. For particulars of these and all other varieties, see Yates' Annual for descriptions and Yates' Current Price List, Section 24, for prices.

BETROOT.

For those who are near suitable markets, Beetroot makes an excellent cash crop. Two main varieties for this purpose are Yates' Derwent Globe and Yates' Turnip-Rooted.

YATES' DERWENT GLOBE.—We regard this as the best of the round types. This is somewhat the later of the two, but is a heavy cropper of beautiful quality as regards shape, texture and colour, and is altogether the finest strain of the Crimson Globe type that we have seen.

YATES' TURNIP-ROOTED.—This has been specially selected by us for earliness and is of remarkable quality as regards texture, colour and evenness of shape. Quite an outstanding strain of the early Flat Egyptian type.

For Prices of these and other Varieties see Section 24 of Yates' Current Price List.

LETTUCE.

Another excellent cash crop for those close to suitable markets. We have been working for many years with a view to selecting stocks most suitable for our conditions and in **YATES' NEAPOLITAN** (New York) we have a particularly fine strain which is very largely grown for market, especially during the cooler portion of the year. It is an attractive dark green of good size and weight, firm and beautifully crisp.

For the warmer seasons we specially recommend our very hardy strain of **AMERICAN SUMMER**. This carries large firm hearts, crisp and good flavoured, light green in colour. For those requiring an excellent all-round variety which is extremely hardy under adverse conditions, we recommend **YATES' ICEBERG**. This stands wonderfully well without bolting to seed and has a light pink edging to the leaves.

For Prices of these and other varieties, see Section 24 of Yates' Current Price List.

CARROTS.

This vegetable has been gaining in favour among those farmers who desire a market crop which can be handled in fair-sized areas.

CHANTENAY (RED CORED).—Is a half long stump-rooted variety which shows quite remarkable hardiness and heavy cropping ability under difficult conditions. It is a most attractive market sort, bright orange scarlet with a small red core, and is rapidly becoming one of the most popular varieties, both for home and market use, particularly when grown in large areas to be marketed in sacks. It is easily lifted and yields a very heavy crop per acre.

YATES' LONG INTERMEDIATE (ST. VALERY).—Is a standard long-pointed variety of finest quality. A great main crop carrot and a favourite market sort, particularly in and around Sydney.

MANCHESTER TABLE (SCARLET NANTES).—Half long blunt ended, very quick maturing sort.

For other standard sorts, see Yates' Annual Catalogue and Current Price List (Section 24).

PARSNIPS.

For those with a suitable soil and climate, Parsnips should be a worth while market crop. If well-grown, they are readily saleable and, provided reliable fresh seed is sown on good deep strong loam in a reasonably cool moist district, they are comparatively easily raised. Undoubtedly the best variety is **HOLLOW CROWN**. We grow our strain of this type on our own Seed Farm in Tasmania and constantly test the seed to maintain freshness in our stocks. This is most important with Parsnip seed.

For Prices, see Section 24 of Yates' Current Price List.

Sundry Farm Crops

Many other Fodder Crops not previously mentioned in this folder and which are of quite minor importance are listed below. They are, generally speaking, grown only in small areas and for special purposes.

For Prices, see Section 6 of Yates' Current Price List.

BUCKWHEAT.—Not a cereal, but a quick-growing plant in the warmer weather, producing large quantities of seeds useful for poultry feeding, etc., also for home use as Buckwheat Cakes. The flowers provide a good honey yield for bees.

KUDZU VINE.—A bean-like vine of vigorous growth. Also described under Legume Crops on previous page.

MELONS, MIXED CATTLE.—Produce a quick, heavy crop of palatable cattle fodder in warm, moist coastal districts.

FIELD PUMPKINS.—Heavy yielders and can be stored for winter feeding.

GRAMMA OR TROMBONE PUMPKINS.—As well as being a splendid vegetable sort, this variety has special feeding value for stock.

SUNFLOWERS.—This giant variety is grown in drills like Maize on rich land. The heavy crop of seeds make rich fodder and always find a market.

Less Important Grasses

Useful for Unusual or Particular Situations

For Prices, see Section 1 of Yates' Current Price List.

TEFF GRASS (ERAGROSTIS ABYSSINICA).—An annual summer grower after the style of Sudan, but much lighter in yields and finer in growth; under Australian conditions it has not proved nearly as good.

PASPALUM COMPRESSUM (CARPET GRASS).—Perennial, summer grower. Does well on poor, hilly country where the common Paspalum dilatatum will not thrive. Much inferior in feeding qualities however, and inclined to oust the better variety on good land. Use with caution.

ELEPHANT GRASS (PENNISSETUM PURPUREUM).—Not a pasture grass, but a tall growing cane-like plant, useful for planting in odd corners to produce a cutting crop. It grows very quickly and, if cut when the shoots are young, makes quite good fodder. Does not seed, but we always have roots available and when once planted they will soon spread.

COW CANE.—When required, we sell cuttings of what we regard as one of the best types of Queensland Cow Cane. Belonging to the Sugar Cane family, it produces an abundance of fine sweet stalks for cutting. Only suitable for planting in hot moist districts. Cuttings only available.

POA AQUATICA (WATER MEADOW GRASS).—One of the best water grasses. Grows right under the water and is relished by all classes of stock. It does not seed, but we can supply roots, which may be planted here and there round the edge of a swamp and they will soon spread.

PASPALUM DISTICHUM.—A useful grass for planting in sour wet, badly drained land. Roots only available.

NOTES ON

The Important Grasses and Clovers For Autumn Sowing

For Prices see Section 1. (Grasses) and Section 4 (Clovers) of Yates' Current Price List

While autumn and early winter is usually the best time for sowing most of the leading pasture improving grasses and clovers (as mentioned below), spring often offers favourable opportunities of establishing these plants in our colder Highland parts. This specially applies in rich moist lands and where good spring and summer rains may be expected.

There is such a wide range now offering of Annual, Biennial, and Perennial sorts that most districts suitable for close settlement can be made to respond profitably to pasture improvement by using the right varieties and strains. It must be remembered that for the phenomenal results which are now being constantly reported careful attention to fertilising and management are essential.

We have been in the vanguard of practical research work and the study of sound economical procedure since the inception of the newer methods of pasture improvement. We have carefully watched the development of pasture work in England and New Zealand for many years, learning how best to apply their successes to our conditions. Our own experience in practical farming and grazing in all its branches has taught us that all theories are not practicable. But success is won when, by test, we find those sound theories which can be applied in a profitable and practical manner. Since the beginning, Arthur Yates & Co. Ltd. has always conducted a Trial and Testing Ground. We are able to test for ourselves every variety and strain produced. We learn further, by correspondence and friendly chats, of the successes and failures in pasture work of thousands of our clients all over the Commonwealth. The benefits of all this wealth of experience and knowledge are available to those of our clients who care to write us asking for advice or suggestions, if they briefly describe their conditions as to soil and climate and the purpose they have in mind.

Beyond all considerations of price in Grass Seeds and Clovers, is quality of Strain and Sample, and a trust in your seedsmen that he understands your conditions and requirements and is genuinely out to supply the most suitable types and strains to the best of his ability. Whether heavy seeding annuals or the long-lived perennial types are required, the seeds must be of vigorous selected strain, high in germinating powers and clean. Our leadership in good pasture seeds has proved Yates' Quality to be the standard for all who want the best results in quickly-established clean and long-lasting pasture swards.

By the co-operation of Government Departments, producers and the leading Seed Merchants, the improvement of strain in the best pasture seeds has been brought to a very high level. Yates' N.Z. Govt. Certified Perennial Rye Grass in both the "Mother seed" and "First Harvest" lines; Yates' Akaroa N.Z. Govt. Certified Cocksfoot; Yates' Phalaris Tuberosa (or Bulbosa); Yates' Wimmera Rye Grass (from selected pastures); Yates' Italian Rye Grass and all other varieties are listed in Section 1 of our Current Price List.

Pasture Clovers of equal quality to the grasses are shown in Section 4 of the Price List. Yates' N.Z. Grown (Cow Grass type) Perennial Red Clover; Yates' Superfine N.Z. White Clover, and Yates' N.Z. Govt. Certified White (or White Dutch) Clover; Yates' Subterranean Clover in both our No. 1 Supergrade and Special "Earlstrain"; also a long list of other Clovers and Sheeps Burnet.

In all pasture seeds our first consideration is the locality where the seed is grown and the quality of the strain and sample. After thoroughly machine-dressing and testing, we quote at the lowest possible price commensurate with the highest possible quality.

Write us, describing your land, climatic conditions and your purpose. We shall reply at once, offering recommendations and suggestions.

All landholders should have a copy of Yates' Book:

"GRASSLAND and GREEN CROP FARMING"
1/- Post Free

In its class it is the equal of our now famous publication:
YATES' GARDEN GUIDE.

ARTHUR YATES & CO. LTD.

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